13 Belmont Street, Somerville, MA, 02143

mark.chase@tufts.edu

Multi-Modal Transportation Specialist Parking Management

Zoning Board of Appeals and Planning Department 93 Highland Ave Somerville, MA 02143 October 8, 2014

Nathan Bice and Marco Hunter-Melo 81 Park St Somerville, MA 02143

Re: Dodakins Transportation & Analysis

To whom it may concern,

We have conducted a parking impact study to determine the parking needs of your restaurant, it's impact on neighborhood streets and the sufficiency of your off-street and adjacent arterial-street parking to meet Dodakins' needs.

Our research team (1) collected parking and transportation data from three benchmarked area restaurants along the Beacon/ Hampshire Street Corridor; (2) conducted on street parking counts to determine the availability of on-street <u>arterial</u> parking to meet the needs of your restaurant and (3) reviewed your internal policies, marketing and strategies to reduce the amount of driving to your restaurant by patrons and employees.

Findings

Based on the parking demand exhibited by similar restaurants on the Beacon Street corridor, the availability of on-street arterial (not side-street) parking and your restaurants policies, we believe that your restaurant can thrive with virtually no negative impact on the surrounding side-streets. We are particularly confident about this due to our estimates of your parking needs, and available parking observed on Beacon Street and Park Streets.

OBSERVED METRIC	FINDINGS
Benchmark Restaurant Parking Demand	On average only 3 cars/ restaurant parked on side streets
On Street Arterial Parking	33 to 44 Spaces available during peak times
Projected Dodakins On-Street Parking Needs	Max of 16 Spaces during peak 2 hours

We summarize our findings below and provide detailed data in our Appendices.

Neighborhood Impact

Our team of researchers coded the transportation modes of 758 patrons departing 3 area restaurants on the Beacon Hampshire Street Corridor:

Restaurant Name	<u>Address</u>	Seating Capacity
Kirkland Tap and	425 Washington Street,	115
Trotter	Somerville (near Beacon)	115
Thirsty Scholar	70 Beacon Street, Somerville	95
Lord Hobo	92 Hampshire Street, Cambridge	98

These three were chosen because they are neighborhood based restaurants with no off-street parking. Based on our findings we are able to project that the majority of your customers (81% for the bench-marked restaurants) will access your restaurant by means other than a personal vehicle.

Benchmark Restaurant	Date	Non Auto Total	Parked Arterial	Parked Neighborhood	% Parked Neighborhood	Auto Mode %
Lord Hobo	3-Oct	178	5	0	0%	3%
Lord Hobo	2-Oct	97	24	0	0%	20%
Thirsty						
Scholar	3-Oct	94	21	2	9%	20%
Thirsty						
Scholar	2-Oct	52	22	7	24%	36%
Kirkland						
Tap &						
Trotter	3-Oct	102	24	4	14%	22%
Kirkland						
Tap &						
Trotter	2-Oct	52	19	5	21%	32%
Average		96	19	3	14%	19%

In addition, of the 19% of customers who did drive to the benchmarked restaurants, only 14% of those (or on average about 3 cars per restaurant over a four hour period) parked on non-arterial streets. Detailed data is available in Appendix A.

Parking Availability on Abutting Streets (not side streets)

On the same night as our restaurant patron counts, we also conducted a street survey to determine available parking on the adjacent arterial streets on which Dodakins is located. We counted parking at three different times to reflect, before, during and after the restaurant peak (6:30/8:30/10:30 Thursday and 7:00/9:00/11:00 Friday). We focused our counts on Beacon Street and Park Street within two blocks of the restaurant. Furthermore we ranked these spaces as near (1) and further away (2) to Dodakins. More accessible spaces were coded (1) if within one block of the restaurant on Beacon Street and on Park Street between Beacon and the Rail Road Tracks. Further spaces were between the 1st and 2nd blocks from Dodakins on Beacon Street. We did not consider any side-streets as your stated intent was to not have any of your customers or employees park on these streets. We also did not include Scott Street which has ample vacant parking at night, but is in Cambridge.

Summary of Parking Availability Near (1) and Further Away (2) from Dodakins:

Day/ Time	Near Parking (1)	Further Away Parking (2)
Thursday 6:30 PM	25 (lowest number)	29 (lowest number)
Thursday 8:30 PM	29	37
Thursday 10:30 PM	35	53
Friday 7:00 PM	39	46
Friday 9:00 PM	33 (peak time)	44 (peak time)
Friday 11:00 PM	38	48

It is important to note that available parking spaces above account for and include the impact of future lost parking due to the Beacon Street Reconstruction Project. Further away parking includes the near parking numbers as a total count of parking in easy walking distance of Dodakins.

Internal Transportation Policies and Customer Communications

You have stated that you will undertake the following policies to reduce parking demand:

<u>Hire Somerville residents as a first priority followed by Cambridge and then Boston residents:</u> American Community Survey (ACS) data from the US Census Bureau shows that only 42% of Somerville residents commute to work by automobile. Furthermore census data shows that 38% of Somerville residents work outside of Cambridge, Somerville and Boston. We surmise from these two trends that hiring locally will dramatically reduce the number of employees driving to Dodakins.

MBTA Transit Pass Subsidy: New employees who work a minimum of 3 shifts per week (24 hours) will be offered three months of MBTA Subway/ Bus (Combo) pass. After three months future passes will be subsidized on an ongoing basis at 25%. Your stated goal is to establish non auto commuting habits which an employee will likely continue after the free-pass period has ended.

Hubway Membership

After completing 3 months of work, every employee who works a minimum of 3 shifts per week will be offered one year of a Hubway membership.

<u>Website Directions:</u> Dodakins website will highlight prominently sustainable/ non-auto modes of transportation and encourage walking, biking and transit as the primary mode of transportation to your restaurant (Appendix C). For those who drive, car-pooling will be encouraged.

Monitoring mode-split one year after opening: You have agreed to monitor your parking impact one year after opening. This will comprise an identical protocol to that used with the benchmarked restaurants noted in this memo. It will also include a survey of cars without resident permit parking on side streets within two blocks of Dodakins.

Estimated Parking Demand and Available On-Street Supply

Customers

In the absence of any parking management techniques described above, and based on the Bench-marked mode shares of Kirkland Tap and Trotter, the Thirsty Scholar and Lord Hobo, we expect that you will see *at most* a car-mode share of 19% of your patrons. Peak driving demand occurs from 8:00 to 9:00 PM on Friday and Saturday nights. Based on a 19% driving rate this amounts to a peak demand of 18 parking spaces.

We believe this number will ultimately be lower due to two important factors:

- Dodakins' website promotes heavily sustainable modes of transportation. It should be noted that none of the bench marked restaurants do this. And,
- Your restaurant will be located on one of the premier bicycling facilities in the Boston area.

Employees

Your commitment to hiring local based employees who are unlikely to drive is an important method of reducing your vehicular impact on the neighborhood. Dodakins is on a heavily used (and soon to be improved) bicycle route, is served by two bus lines and is within a fifteen minute walk of two major subway stations and a commuter rail station (Porter).

While difficult to precisely estimate we believe that given your hiring practices your employee drive alone rate will not exceed one third of the city-wide rate (42%), or 14%.

Total Parking Demand

Type of User	Peak Demand	Percent Driving	Parking Needed
Customer	94 Customers/ 2 hour period/ Friday & Saturday Night	19	18 Spaces
Employee	16 Employees	14	3 Spaces
Total Parking Needed			21 Spaces
Parking on-site			5
On Street Parking Needed (Peak 2 Hours)			16

Impact on Neighborhood Streets

As noted above, during the peak period of demand for Dodakins' patrons, 33 parking spaces are free nearby. As already noted, these are counting only the cross streets of Beacon and Park Street which directly abut Dodakins. This also takes into account parking lost due to Beacon Street reconstruction. Given the convenience of on street parking closer to Dodakins than adjacent side streets and that customers prefer to park in the closest available parking space to their destination, we do not anticipate any overflow on to non-arterial streets.

Appendix A: Benchmark Restaurants

Restaurant	Date	Walk	Bike	Taxi	Pick up	Bus	Non Auto Total	Parked Arterial	Parked N'hood	Auto Total	Parked Hood %	Auto Mode %
Lord Hobo	3-Oct	149	25	1	2	1	178	5	0	5	0%	3%
Lord Hobo	2-Oct	78	8	0	6	5	97	24	0	24	0%	20%
Thirsty Scholar	3-Oct	82	4	2	6	0	94	21	2	23	9%	20%
Thirsty Scholar	2-Oct	48	4	0	0	0	52	22	7	29	24%	36%
Kirkland Tap & Trotter	3-Oct	85	8	0	9	0	102	24	4	28	14%	22%
Kirkland Tap & Trotter	2-Oct	46	2	0	4	0	52	19	5	24	21%	32%
TOTALS/ AVERAGE		488	51	3	27	6	575	115	18	133	14%	19%

Appendix B: On Street Parking Counts

Street Name	Between	And	Rank/ Access to Dodakins	Night of Week	Date	Time	Total Pkg	Cars Pkd	Vac-	% Free	Post Beacon St. Reconst. Total	Net Avail Spaces Post Reconst
Beacon	Ivaloo	Park	1	Thursday	10/2/2014	6:30	19	8	11	58%	5	-3
Beacon	Park	Properzi	1	Thursday	10/2/2014	6:30	26	9	17	65%	16	7
Park	Beacon	Morgan	1	Thursday	10/2/2014	6:30	18	6	12	67%	18	12
Park	Morgan	RR Tracks	1	Thursday	10/2/2014	6:30	16	7	9	56%	16	9
Beacon	Ivaloo	Park	1	Thursday	10/2/2014	8:30	19	0	19	100%	5	5
Beacon	Park	Properzi	1	Thursday	10/2/2014	8:30	26	16	10	38%	16	0
Park	Beacon	Morgan	1	Thursday	10/2/2014	8:30	18	7	11	61%	18	11
Park	Morgan	RR Tracks	1	Thursday	10/2/2014	8:30	16	3	13	81%	16	13
Beacon	Ivaloo	Park	1	Thursday	10/2/2014	10:30	19	0	19	100%	5	5
Beacon	Park	Properzi	1	Thursday	10/2/2014	10:30	26	7	19	73%	16	9
Park	Beacon	Morgan	1	Thursday	10/2/2014	10:30	18	10	8	44%	18	8
Park	Morgan	RR Tracks	1	Thursday	10/2/2014	10:30	16	3	13	81%	16	13
Beacon	Muesum	Ivaloo	2	Thursday	10/2/2014	6:30	54	11	43	80%	18	7
Beacon	Properzi	Durham	2	Thursday	10/2/2014	6:30	20	11	9	45%	8	-3
Beacon	Muesum	Ivaloo	2	Thursday	10/2/2014	8:30	54	1	53	98%	18	17
Beacon	Properzi	Durham	2	Thursday	10/2/2014	8:30	20	17	3	15%	8	-9
Beacon	Muesum	Ivaloo	2	Thursday	10/2/2014	10:30	54	1	53	98%	18	17
Beacon	Properzi	Durham	2	Thursday	10/2/2014	10:30	20	7	13	65%	8	1
Beacon	Ivaloo	Park	1	Friday	10/3/2014	7:00	19	0	19	100%	5	5
Beacon	Park	Properzi	1	Friday	10/3/2014	7:00	26	4	22	85%	16	12
Park	Beacon	Morgan	1	Friday	10/3/2014	7:00	18	8	10	56%	18	10
Park	Morgan	RR Tracks	1	Friday	10/3/2014	7:00	16	4	12	75%	16	12
Beacon	Ivaloo	Park	1	Friday	10/3/2014	9:00	19	0	19	100%	5	5

Street Name	Between	And	Rank/ Access to Dodakins	Night of Week	Date	Time	Total Pkg	Cars Pkd	Vac- ant	% Free	Post Beacon St. Reconst. Total	Net Avail Spaces Post Reconst
Beacon	Park	Properzi	1	Friday	10/3/2014	9:00	26	11	15	58%	16	5
Park	Beacon	Morgan	1	Friday	10/3/2014	9:00	18	8	10	56%	18	10
Park	Morgan	RR Tracks	1	Friday	10/3/2014	9:00	16	3	13	81%	16	13
Beacon	Ivaloo	Park	1	Friday	10/3/2014	11:00	19	0	19	100%	5	5
Beacon	Park	Properzi	1	Friday	10/3/2014	11:00	26	3	23	88%	16	13
Park	Beacon	Morgan	1	Friday	10/3/2014	11:00	18	10	8	44%	18	8
Park	Morgan	RR Tracks	1	Friday	10/3/2014	11:00	16	4	12	75%	16	12
Beacon	Muesum	Ivaloo	2	Friday	10/3/2014	7:00	54	7	47	87%	18	11
Beacon	Properzi	Durham	2	Friday	10/3/2014	7:00	20	12	8	40%	8	-4
Beacon	Muesum	Ivaloo	2	Friday	10/3/2014	9:00	54	3	51	94%	18	15
Beacon	Properzi	Durham	2	Friday	10/3/2014	9:00	20	12	8	40%	8	-4
Beacon	Muesum	Ivaloo	2	Friday	10/3/2014	11:00	54	7	47	87%	18	11
Beacon	Properzi	Durham	2	Friday	10/3/2014	11:00	20	9	11	55%	8	-1



IF YOU MUST DRIVE PLEASE BE AWARE THAT WE HAVE A SMALL PARKING
LOT AND ON-STREET PARKING IS LIMITED
WE ENCOURAGE YOU TO REACH US BY FOOT, BICYCLE OR TRANSIT

Appendix D: Customers Per hour/ Parking Needs by Hour Weekend and Weekday Night

Weekend Hours of Operation	5PM	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1AM
Expected Customers	22	39	43	49	73	85	94	90	81	68	38	32	31	19	16	19	15
Customer Parking Demand	5	8	9	10	14	17	18	18	16	13	8	7	6	4	4	4	3
Employee Demand	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
On Site Parking	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
On Street Need	3	6	7	8	12	15	16	16	14	11	6	5	4	2	2	2	1

Weeknight Hours of Operation	5PM	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1AM
Expected																	
Customers	11	15	15	17	41	54	70	54	48	39	16	20	20	10	7	6	4
Customer Parking																	
Demand	3	3	3	4	8	11	14	11	10	8	4	4	4	2	2	2	1
Employee Demand	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
On Site Parking	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
On Street Need	1	1	1	2	6	9	12	9	8	6	2	2	2	0	0	0	-1